

**REMARKS**

After entry of the foregoing amendments, claims 1-7 are pending in the application. Claims 1-5 are rejected. New claims 6 and 7 are added via this Amendment.

**35 U.S.C. §103:**

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent No. 289610 (hereinafter “JP ‘610”). Applicant respectfully traverses this rejection in view of the following remarks.

Rejections under 35 U.S.C. §103 are proper only when the applied reference would have taught or suggested each feature recited in the claims. JP ‘610 fails to teach or suggest each feature recited in independent claims 1 and 2, including the claimed rotational angle detection sensor. In particular, the present invention provides a novel and unobvious intake air control apparatus with beneficial aspects not taught or suggested by the prior art. The Examiner also acknowledges that JP ‘610 does not disclose at least the rotational angle detection sensor for detecting a change in the azimuth of magnetic flux, and relies on “Office Notice” that this feature is well known.

Prior art references utilize a Hall element that detects a change in density of magnetic flux lines passing through the element. (See page 1, paragraph 3 of the specification.) JP ‘610 utilizes such a Hall element and is specifically mentioned in the specification (*Id.*). The use of

the Hall element in the context of JP '610 has detriments such as requiring a high degree of mounting accuracy. (See page 1, last paragraph of the specification.)

The present invention overcomes detriments in the prior art by utilizing a sensor of the magnetic flux azimuth detection type. In comparison with the conventional Hall element of JP '610, the sensor of the present invention can generate an output in the presence of a magnetic field of 1-10% of that needed by the Hall element. (See page 6, first line of the specification.) Further, the prior art requires a permanent magnet having a high coercivity, such as a rare earth permanent magnet, which is costly. On the other hand, a low-cost ferrite magnet can be used in the present invention. (See page 6, lines 2-6 of the specification.) Thus, the claimed arrangement reduces the accuracy needed during assembly of the permanent magnet and the sensor, which reduces manufacturing costs, as compared with the prior art (i.e., the Hall element.) (See page 6, last paragraph of the present specification.) Accordingly, the present invention provides beneficial features that are not disclosed by the prior art.

Turning to the grounds of rejection, Applicant notes that the mere fact that a reference can be modified does not make the resultant modification obvious unless the prior art also suggests the desirability of the modification. See *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). JP '610 does not teach or suggest any sort of desirability that would have lead one to modify the device of JP '610 so as to derive the claimed features. Thus, for this reason alone, the rejection must be withdrawn.

Moreover, Applicant submits that the Examiner has not shown that his allegation of “Official Notice” is capable of instant and unquestionable demonstration as being “well-known,” as required by MPEP §2144.03, nor has the Examiner provided specific factual findings predicated on sound technical and scientific reasoning to support his conclusion of common knowledge, as required by MPEP §2144.03(B). In effect, the Examiner has not provided any particular factual basis for his conclusion besides alleging that “Applicant’s own specification supports this.” (See last line, page 2 of the Office Action.) It is pointed out that the portions of the specification that describe the claimed features have been provided by the present inventor and cannot be used as a basis for rejection. Also, the “Description of the Related Art” discusses the Hall element and does not support the Examiner’s taking of “Official Notice.”

Moreover, Applicant points out that the Examiner may not rely on “Official Notice” or judicial notice or a mere statement of obviousness at a point where patentable novelty is argued, but must come forward with pertinent prior art. (See *Ex parte Cady*, 148 USPQ 162 (Bd. of App. 1965).) Here, as noted above, one of the points of novelty is the inclusion of the rotational angle detection sensor for detecting a change in the azimuth of magnetic flux of the permanent magnet. The Examiner has not cited any prior art that teaches or suggests this novel aspect of the present invention.

With specific regard to claim 2, it is pointed out that a first permanent magnet and a second permanent magnet are recited, in addition to the rotational angle detection sensor. These features are illustrated in the exemplary, non-limiting embodiment of Figure 11 and are neither

discussed by the Examiner nor disclosed in the applied reference, resulting in the rejection being facially incomplete and further evidencing the unobvious aspects of claim 2.

Accordingly, Applicant respectfully submits that the features of claims 1 and 2 are not obvious in light of JP '610, thus requiring the rejection thereof under 35 U.S.C. §103(a) to be withdrawn. The rejection of claims 3-5 should likewise be withdrawn at least by virtue of their respective dependencies on claims 1 and 2.

**NEW CLAIMS:**

Applicant adds new claims 6 and 7 to obtain more varied protection for the invention. These claims are deemed patentable over the applied art at least by virtue of their dependency on claim 1.

In view of the preceding amendments and remarks, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue that the Examiner feels may be best resolved through a personal or telephonic interview, the Examiner is kindly requested to contact the undersigned attorney at the local telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.111  
U.S. Serial No. 10/765,358

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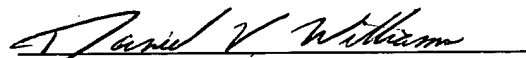
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**23373**

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